

CLAIMS

1. Method for molecular adhesion of a second electronic compound (6) on a first electronic compound (1), the contact surface of the first electronic compound (1) containing a polymer (4) comprising the coating, with a bonding layer (5), of at least some of the surface of the polymer (4) contained at the surface of the first electronic compound (1), with the molecular adhesion taking place between said bonding layer (5) and the second electronic compound (6).

2. Method according to claim 1 comprising the cleaning of the contact surface of the second electronic compound (6) and/or its coating with a layer (7) similar to the bonding layer (5).

3. Method according to one of claims 1 or 2, comprising the thinning of the second electronic compound (6) after adhesion thereof to the bonding layer (5).

4. Method according to one of claims 1 to 3, comprising the heat treatment of the assembly of the two compounds (1, 6) after adhesion.

5. Method according to one of claims 1 to 4, wherein the coating is produced by deposition of a bonding layer (5) having a thickness between 50 and 300 nm.

6. Method according to one of claims 1 to 5 comprising the polishing of the bonding layer (5).

7. Method according to one of claims 1 to 5 6 comprising the activation of the bonding layer (5).

8. Method according to one of claims 1 to 7 comprising the cross-linking of the polymer (4) prior to the coating thereof.

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9. Method according to one of the previous claims, wherein the bonding layer (5) consists of silicon oxide.

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10. Method for producing an array (10) of stacked electronic compounds (1) comprising the development of at least one first electronic compound (1) so that the surface of the first electronic compound at least partially consists of a polymer (4), and the adhesion on this surface of a second compound (6) according to the method defined in one of claims 1 to 9.

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11. Three-dimensional array (10) of electronic compounds (1) comprising a plurality of interface layers (5), wherein each of the interface layers (5) is at least equal to the surface of the array (10) at the level of said interface layer (5), so that at least some of the interface layers (5) directly separate a polymer (4) from at least one electronic component (3).

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12. Array according to claim 11, consisting of a stack of electronic compounds (1, 1'), wherein each compound (1) has the same shape and/or size as the adjacent compound (1') from which it is separated by an
5 interface layer (5).

13. Array according to one of claims 11 or 12, wherein the interface layers (5) consist of silicon oxide, silicon nitride and/or silicon oxynitride.